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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,396	11/15/2001	Benjamin J. Parker	1692 (15725)	5884

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EXAMINER
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PARRY, CHRISTOPHER L

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/004,396	PARKER ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Chris Parry	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 November 2001.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-15 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 15 November 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date: _____.   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/18/2001</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Reference sign 82 in figure 5; reference sign 93 in figure 6. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: On page 2, line 29, "apparatus for" should be --an apparatus for--. On page 9, lines 19-20, applicant uses reference signs 65, 68, and 72 to describe both coaxial cable connections and TV adapters. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al. "Hylton" (U.S. 5,708,9610) in view of de Hass (U.S. 6,408,436) and further in view of Rakib (U.S. 2002/0019984).

Regarding Claim 1, Hylton discloses a digital network that delivers multiplexed channels to a customer premises (Abstract). Hylton teaches, "a centralized gateway for connecting to said plurality of televisions and to a digital network supplying packet-based video content according to a plurality of selectable video feeds" by disclosing shared processing system 10 or "centralized gateway" as shown in figure 1. Hylton discloses shared processing system 10 selects program signals from those available on the digital broadband network 5 for each of the televisions connected to terminals 100 (Col. 4, line 54 – Col. 5, line 48). Hylton teaches, "a wide-area network interface for receiving network packets from said digital network" by disclosing in figure 1, the shared processing system 10 includes channel selector 11. The structure and operation of the channel selector and program selector depend on the type of network 5 from which the processing system 10 receives programming and the type of channelization utilized on that network. The channel selector 11 selects one of the channels received from the

network 15 and supplies the digital stream from that channel to the corresponding program selector 13 (Col. 5, lines 58-67). Hylton teaches, "a processor coupled to said wide-area network interface for initiating requests for selected video feeds and for converting said received network packets into at least one compressed data stream" by disclosing controller 19 or "processor" controls all operations of the shared processing system 10 as well as two-way signaling communications via the network 5. The controller 19 instructs the channel selector 11 serving the set-top 100 that sent the request to select the channel from network 5 that is carrying the program selected by the user. The controller 19 also instructs the program selector 13 serving the set-top 100 that sent the request to select the program information from the digital stream on the selected channel. The controller 19 may also provide instructions to the multiplexer 15 regarding the packet identifiers to be used when multiplexing the program into the transport stream for transmission to the set-top 100 that sent the request. Consequently, the multiplexed transport stream output by the multiplexer 15 will include the digitized and compressed program information for the program selected by the user (Col. 8, line 6 – Col. 9, line 8). Hylton teaches, "at least one gateway-to-local-area network interface" by disclosing signaling data transceiver 21 as shown in figure 1 (Col. 8, line 6 – Col. 9, line 8). Hylton teaches, "a plurality of port extender modules, each associated with a respective television" by disclosing set-top terminals 100 as shown in figure 1 connected to TV 103 (Col. 8, lines 6-45). Hylton teaches the port extender comprises, "at least one peripheral device interface for connecting to a peripheral user device providing user data, said user data including selection data to be provided to

said processor to identify selected video feeds for said requests" by disclosing IR receiver 145 as shown in figure 4 (Col. 16, lines 54-65). Hylton teaches the port extender further comprises, "a local-area network interface coupled to said gateway-to-local-area network interface" by disclosing set-top 100 includes a network interface module (not shown) for wired networks and a transport interface module 101 as shown in figure 4 is used to wirelessly transmit control signals between DET 102 and shared processing system 10 (Col. 13, line 50 – Col. 14, line 29). Hylton teaches the port extender further comprises, "a protocol encapsulation processor for transporting said user data to said local-area network interface" by disclosing CPU 105 comprising microprocessor 110 which is used to interpret the digital data signals by the IR receiver 145 as input commands to process and transmit back to shared processing system 10 (Col. 16, line 33 – Col. 17, line 6). However, Hylton fails to disclose the shared processing system 10 or "centralized gateway" comprising a plurality of decoders, a plurality of TV adapters, and an address server. Hylton also fails to disclose each set-top or "port extender" responding to a corresponding IP address. In a related art pertaining to video distribution, de Hass discloses centralized gateway 130 as shown in figure 2 comprising, "a plurality of decoders coupled to said processor for uncompressing a respective data stream" by disclosing video decoders 1-N as shown in figure 2 (Col. 6, line 46 – Col. 7, line 25). De Hass further discloses "a plurality of television adapters coupled to said decoders and each adapted to be coupled to one of said televisions, said television adapters generating television signals usable by said televisions in response to a selected uncompressed data stream" by disclosing

modulators 240 or "TV adapters" as shown in figures 2 and 4 connected directed to display device or "TV" (Col. 7, lines 12-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hylton with the teachings of De Hass in order for centralized gateway to comprise a plurality of decoders and a plurality of TV adapters for the benefit of minimizing the bandwidth used when transmitting a video program on a particular channel to multiple display devices associated with one gateway device (Summary – de Hass).

The combination of Hylton and de Hass fail to explicitly disclose centralized gateway comprises an address server that assigns IP address to port extenders, in which the port extenders are responsive to the corresponding IP address assigned. In a related art pertaining to video distribution, Rakib discloses advanced home gateway as shown in figure 8, comprises a DHCP server 320 or "address server" that assigns IP addresses to clients on the LANs and in the gateway when they power up (¶ 127). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Hylton and de Hass with the teachings of Rakib in order to facilitate an address server that assigns IP address to port extenders, in which the port extenders are responsive to the corresponding IP address assigned for the benefit of implementing a gateway that can implement TIVO like functions as well as interface peripherals to various types of broadband digital data delivery transmission mediums (Background – Rakib).

As for Claim 2, Hylton teaches, “wherein each of said port extender modules is located proximate to its respective television” by disclosing in figure 1, each terminal 100 or “port extender” is placed on top of TV 103.

As for Claim 3, Hylton teaches, “a wireless communication link between said gateway-to-local area network interface and said local-area network interface” by disclosing shared processing system 10 or “gateway” comprises signaling data transceiver 21 coupled to antenna 27 and is wirelessly coupled to terminal 100 by TIM 101 coupled to antenna 29. Hylton discloses control messages are sent to the TIM 101 for wireless transmission from antenna 29 and are received at the shared processing system 10 via the antenna 27 connected to transceiver 21 (Col. 8, lines 18-45).

As for Claim 4, Hylton teaches, “gateway-to-local area network interface and said local-area network interface are comprised of respective transceivers coupled together via a cable carrying said television signals” by disclosing for wire connected implementations, the terminal would include a network interface module (not shown) in place of the TIM 101. The network interface module provides the actual physical connection to the particular type of network. For example, in a fiber to the home network, the module 101 would include means for two-way conversion between electrical and optical signals and connections to one or more optical fibers for the necessary two-way transmission (Col. 13, lines 59-67).

As for Claim 5, Hylton and de Hass fail to explicitly disclose a network UTP cable connected between said gateway-to-local area network interface and said local-area network interface. In a related art pertaining to video distribution, Rakib discloses

advanced home gateway comprises NIC 312, which contains all the hardware and software to manage and communicate over an IEEE 802.3 or 802.5 Ethernet protocol LAN implemented on Category 3, 4 or 5 unshielded twisted pair wiring or over shielded twisted pair or coaxial cable (¶ 118). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Hylton and de Hass with the teachings of Rakib in order to facilitate the use of UTP cable for the benefit of implementing a gateway that can implement TIVO like functions as well as interface peripherals to various types of broadband digital data delivery transmission mediums (Background – Rakib).

As for Claim 6, Hylton teaches, “wherein said peripheral device interface includes a remote control interface for receiving said selection data from a remote control device” by disclosing IR receiver 145 or “peripheral device” responds to input signals from a user operated IR remote control 85 (Col. 16, lines 54-62).

As for Claim 7, Hylton and de Hass fail to explicitly disclose the gateway includes a storage media containing a compressed video file, and wherein said selection data can further select viewing of said video file at said respective television. In a related art pertaining to video distribution, Rakib discloses advanced home gateway comprises a TIVO video server and bulk storage hard drive 322 (¶ 57 and 127). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Hylton and de Hass with the teachings of Rakib in order for gateway to comprise a storage media containing compressed video files for the benefit of implementing a gateway that can implement TIVO like functions as well as interface

peripherals to various types of broadband digital data delivery transmission mediums (Background – Rakib).

As for Claim 8, Hylton teaches, “[a] processor determines whether selection data from one port extender module is equivalent to selection data from another port extender module and, if they are equivalent, provides a corresponding video feed to both televisions corresponding to said one and another port extenders” by disclosing the controller 19 or “processor” instructs the channel selector 11 to selected the channel from network 5 that is carrying the channel selected by the user (Col. 8, line 35 – Col. 9, line 8). Therefore, if two users both selected the same channel from their set-top or “port extender” the controller would transmit the same channel to each port extender.

As for Claim 9, Hylton teaches, “wherein said peripheral device interface includes a serial bus interface” by disclosing RS232 interface 151 shown in figure 4 (Col. 17, lines 33-40).

As for Claim 12, Hylton fails to disclose wherein said television adapters comprise outputs for connecting to a standard television coaxial cable. In a related art pertaining to video distribution, de Hass disclose modulators 240 or “TV adapters” are connected to display devices 310 as shown in figure 4. However, de Hass fails to explicitly disclose if the modulators are connected to the display devices using a standard television coaxial cable. The examiner gives Official Notice that it is notoriously well known in the art of video distribution to connect set-top boxes that comprise a television adapter to a television using a coaxial cable. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

the combination of Hylton and de Hass in order for the television adapters to comprise outputs for connecting to a standard television coaxial cable because coaxial cables are commonly used to connect home video equipment.

As for Claim 13, Hylton teaches, “wherein said centralized gateway includes a plurality of gateway-to-local-area network interfaces, each connected to a respective one of said port extender modules” by disclosing shared processing system 10 or “centralized gateway” includes signaling data transceiver or “local-area network interface” which is used to wirelessly communicate to each terminal 100 or “port extender” through TIM 101 or “local-area network interface” (Col. 8, lines 6-45). Hylton further discloses the system may be wired and the terminal or “port extender” would include a network interface to communicated with shared processing system 10 (Col. 13, lines 50-63).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton in view of de Hass in view of Rakib as applied to claim 1 above, and further in view of Humpleman (U.S. 6,493,874).

As for Claim 10, the combination of Hylton, de Hass, and Rakib fail to disclose port extender comprising a peripheral device interface that includes a game-port interface. In a related art pertaining to video distribution, Humpleman discloses set-top 40 or “port extender” comprises an interface for game ports (Col. 10, lines 4-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Hylton, de Hass, and Rakib with the

teachings of Humpleman in order for a port extender to comprise a peripheral device interface that includes a game-port interface for the benefit of providing a means for a user to send control signals to a game that is being played through the set-top terminal.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton in view of de Hass in view of Rakib as applied to claim 1 above, and further in view of Williams Jr. (U.S. 6,202,211).

As for Claim 11, the combination of Hylton, de Hass, and Rakib fail to disclose wherein a peripheral device interface includes a keyboard interface. In a related art pertaining to video distribution, Williams Jr. discloses each set-top box 22 or "port extender" receives inputs from a keyboard (Col. 4, lines 61-67). So, set-top box 22 or "port extender" must comprise an interface for the keyboard in order to receive input commands from the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Hylton, de Hass, and Rakib with the teachings of Williams Jr. in order for a port extender to comprise a peripheral device interface that includes a keyboard interface for the benefit of providing a technology which allows the processing power of a conventional PC to be integrated seamlessly with a TV as a display device in the home environment (Background – Williams Jr.).

7. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton in view of de Hass and further in view of Rakib.

Regarding Claim 14, Hylton discloses a digital network that delivers multiplexed channels to a customer premises (Abstract). Hylton teaches, "connecting centralized gateway to a digital network that supplies packet-based video content according to a plurality of selectable video feeds" by disclosing shared processing system 10 or "centralized gateway" as shown in figure 1. Hylton discloses shared processing system 10 selects program signals from those available on the digital broadband network 5 for each of the televisions connected to terminals 100 (Col. 4, line 54 – Col. 5, line 48). Hylton teaches, "connecting a first port extender module to said centralized gateway, said first port extender being associated with a first television..." by disclosing set-top terminal 100 as shown in figure 1 connected to TV 103 (Col. 8, lines 6-45). Hylton teaches, "connecting a second port extender module to said centralized gateway, said second port extender being associated with a second television..." by disclosing set-top terminal 100 as shown in figure 1 connected to TV 103 (Col. 8, lines 6-45). Hylton teaches, "said first port extender module communicating with a first remote control for identifying a first selected video feed" by disclosing remote control 85 which can be used by the user to select video feeds as shown in figure 1 (Col. 8, lines 35-45). However, Hylton fails to disclose connecting a first television supply cable to a first respective television adapter output of said centralized gateway and connecting a second television supply cable to a second respective television adapter output of said centralized gateway. In a related art pertaining to video distribution, de Hass teaches,

"connecting a first television supply cable to a first respective television adapter output of said centralized gateway" by disclosing modulator 240 or "TV adapters" as shown in figures 2 and 4 connected directed to display device or "TV" by coaxial cable (Col. 7, lines 12-35). De Hass further teaches, "connecting a second television supply cable to a second respective television adapter output of said centralized gateway" by disclosing modulator 240 or "TV adapters" as shown in figures 2 and 4 connected directed to display device or "TV" by coaxial cable (Col. 7, lines 12-35). De Hass further discloses "...a first/second television coupled to said first/second television supply cable" by disclosing modulators 240 in figure 2, each have a television supply cable that connect to a corresponding display device or "television". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hylton with the teachings of De Hass in order for centralized gateway to comprise a plurality of decoders and a plurality of TV adapters for the benefit of minimizing the bandwidth used when transmitting a video program on a particular channel to multiple display devices associated with one gateway device (Summary – de Hass).

The combination of Hylton and de Hass fail to disclose a first port extender module communicating with said centralized gateway to request an IP address; said centralized gateway assigning a first IP address to said first port extender module, said centralized gateway further associating said first IP address with said first television adapter; said second port extender module communicating with said centralized gateway to request an IP address; said centralized gateway assigning a second IP address to said second port extender module, said centralized gateway further

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associating said second IP address with said second television adapter; said first port extender module sending selection data to said centralized gateway in response to said first selected video feed, said selection data including said first IP address; and said centralized gateway retrieving said first selected video feed from said digital network and generating a corresponding first television signal at said first television adapter, wherein said centralized gateway identifies said first television adapter in response to said first IP address. In a related art pertaining to video distribution, Rakib teaches, "said first port extender module communicating with said centralized gateway to request an IP address" by disclosing when a client/set-top or "port extender" is powered up, the DHCP server 320 is notified by client/set-top or "port extender" of the power up and that a IP address is request so DHCP server 320 assigns each client/set-top or "port extender" an IP address (¶ 124-127). Rakib teaches, "said centralized gateway assigning a first IP address to said first port extender module, said centralized gateway further associating said first IP address with said first television adapter" by disclosing DHCP server 320 assigns clients/set-tops or "port extenders" IP addresses when powered up. Rakib further discloses when the original request for the program was received by one of the LAN NICs 310, 312, 314, 316 or 318, or "TV adapters" it has the LAN packet header stripped off by the NIC or "TV adapter" and the IP packet containing the request is sent to router 302. The router 302 sends it to the host microprocessor 308. The host microprocessor 308 determines from the LAN packet source address containing the request which peripheral's network adapter/transceiver transmitted the request on the LAN. Therefore, the LAN NIC or "TV adapter" has an IP address associated that

corresponds with the requesting client or “port extender” (¶ 124-127). Rakib teaches, “said second port extender module communicating with said centralized gateway to request an IP address” by disclosing DHCP server 320 assigns clients/set-tops or “port extenders” IP addresses when powered up. Rakib further discloses when the original request for the program was received by one of the LAN NICs 310, 312, 314, 316 or 318, or “TV adapters” it has the LAN packet header stripped off by the NIC or “TV adapter” and the IP packet containing the request is sent to router 302. The router 302 sends it to the host microprocessor 308. The host microprocessor 308 determines from the LAN packet source address containing the request which peripheral's network adapter/transceiver transmitted the request on the LAN. Therefore, the LAN NIC or “TV adapter” has an IP address associated that corresponds with the requesting client or “port extender” (¶ 124-127). Rakib teaches, “said centralized gateway assigning a second IP address to said second port extender module, said centralized gateway further associating said second IP address with said second television adapter” by disclosing when a client/set-top or “port extender” is powered up, the DHCP server 320 is notified by client/set-top or “port extender” of the power up and that a IP address is request so DHCP server 320 assigns each client/set-top or “port extender” an IP address (¶ 124-127). Rakib teaches, “said first port extender module sending selection data to said centralized gateway in response to said first selected video feed, said selection data including said first IP address” by disclosing when the original request for the program, sent from the requesting client or “port extender”, was received by one of the LAN NICs 310, 312, 314, 316 or 318, or “TV adapters” it has the LAN packet header

stripped off by the NIC or "TV adapter" and the IP packet containing the request is sent to router 302. The LAN packet header comprises a source address and a destination address. So the source address is the IP address of the requesting client or "port extender" and the destination address is the IP address of the LAN NIC or "TV adapter" as required by the IP protocol (¶ 124-127). Rakib teaches, "said centralized gateway retrieving said first selected video feed from said digital network and generating a corresponding first television signal at said first television adapter, wherein said centralized gateway identifies said first television adapter in response to said first IP address" by disclosing when the original request for the program, sent from the requesting client or "port extender", was received by one of the LAN NICs 310, 312, 314, 316 or 318, or "TV adapters" it has the LAN packet header stripped off by the NIC or "TV adapter" and the IP packet containing the request is sent to router 302. The router 302 sends it to the host microprocessor 308. The host 308 then forwards the request to the appropriate transceiver in block 300 via router 302 for transmission to the headend. Later, a downstream message is received from the headend that gets routed to host 308 and tells the host which logical channel(s) and subchannel(s) the data encoding the requested program will be arriving on. The host 308 then sends a command via router 302 to the appropriate transceiver/modem in block 300, where necessary, to control it to tune to the right logical channel(s) and subchannel(s) to receive the data. In this example, logical channel is the frequency of the carrier and logical subchannel is the timeslot, spreading code or PID used to transmit the data of the requested program in this example. Host 308 then sends a message via router 302

to the MPEG transport demultiplexer telling which MPEG packets to pick out from the received MPEG transport stream. A message is then sent to IP packetization circuit 306 via router 302 telling it to which IP address to address the IP packets containing the MPEG packets picked out by the MPEG transport demultiplexer. The host then sends a message to router 302 telling it to which NIC to route those IP packets. At the NIC, the IP packets are encapsulated into whatever type packet is used in the particular protocol implemented by the NIC, and they are transmitted to the proper NIC on the LAN or the proper wireless transceiver. The receiving NIC or transceiver then strips off the LAN packet header and routes the IP packet to whatever process the IP packet is addressed to (¶ 118-127) Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Hylton and de Hass with the teachings of Rakib in order to facilitate the centralized gateway assigning IP addresses to the port extenders for the benefit implementing a gateway that can implement TIVO like functions as well as interface peripherals to various types of broadband digital data delivery transmission mediums and use IP addresses to route IP packets between components of the gateway and the client's set-top (Background – Rakib).

As for Claim 15, Hylton teaches, "said second port extender module communicating with a second remote control for identifying a second selected video feed" by disclosing remote control 85 which can be used by the user to select video feeds as shown in figure 1 (Col. 8, lines 35-45). Hylton teaches, "said centralized gateway comparing said first selected video feed and said second selected video feed"

by disclosing in operation, a user will activate a remote control 85 to select a program. The DET 102 will receive the program selection from the remote control and compile a message identifying the selected program. The DET 102 supplies the message to the TIM 101 for wireless transmission from antenna 29. The message is received at the shared processing system 10 via the antenna 27 and demodulated by transceiver 21. The transceiver 21 supplies the message to the controller 19 for processing. The controller will recognize the message as relating to a channel selection by the particular one of the set-top terminals 100 (Col. 8, lines 35-45). The controller 19 reads on comparing the first selected video feed and second video feed as the controller can recognize the received messages as messages relating to channel selections so therefore the messages can be compared. However, the combination of Hylton and de Hass fail to disclose said second port extender module sending selection data to said centralized gateway in response to said second selected video feed, said selection data including said second IP address; if said first and second selected videos feeds are the same, then said centralized gateway coupling said first television signal to said first and second television adapters simultaneously; and if said first and second selected videos feeds are not the same, then said centralized gateway retrieving said second selected video feed from said digital network and generating a corresponding second television signal at said second television adapter, wherein said centralized gateway identifies said second television adapter in response to said second IP address. In a related art pertaining to video distribution, Rakib teaches, "said second port extender module sending selection data to said centralized gateway in response to said second selected

video feed, said selection data including said second IP address" by disclosing when the original request for the program was received or transmitted by the client's set-top or "port extender", by one of the LAN NICs 310, 312, 314, 316 or 318, or "TV adapters" it has the LAN packet header stripped off by the NIC and the IP packet containing the request is sent to router 302. The LAN packet header comprises a source address and a destination address. So the source address is the IP address of the requesting client or "port extender" and the destination address is the IP address of the LAN NIC or "TV adapter" as required by the IP protocol (¶ 124-127). Rakib teaches, "if said first and second selected videos feeds are the same, then said centralized gateway coupling said first television signal to said first and second television adapters simultaneously" by disclosing the IP packets will be routed to each client or "port extender" via LAN NIC or "TV adapter" (¶ 124-127). Rakib further discloses, "if said first and second selected videos feeds are not the same, then said centralized gateway retrieving said second selected video feed from said digital network and generating a corresponding second television signal at said second television adapter, wherein said centralized gateway identifies said second television adapter in response to said second IP address" by disclosing when the original request for the program was received by one of the LAN NICs 310, 312, 314, 316 or 318, or "TV adapters" from the first or second client or "port extender" it has the LAN packet header stripped off by the NIC and the IP packet containing the request is sent to router 302. The router 302 sends it to the host microprocessor 308. The host 308 then forwards the request to the appropriate transceiver in block 300 via router 302 for transmission to the headend. Later, a

downstream message is received from the headend that gets routed to host 308 and tells the host which logical channel(s) and subchannel(s) the data encoding the requested program will be arriving on. Host 308 then sends a message via router 302 to the MPEG transport demultiplexer telling which MPEG packets to pick out from the received MPEG transport stream. A message is then sent to IP packetization circuit 306 via router 302 telling it to which IP address to address the IP packets containing the MPEG packets picked out by the MPEG transport demultiplexer. The host then sends a message to router 302 telling it to which NIC to route those IP packets. At the NIC, the IP packets are encapsulated into whatever type packet is used in the particular protocol implemented by the NIC, and they are transmitted to the proper NIC on the LAN or the proper wireless transceiver. The receiving NIC or transceiver then strips off the LAN packet header and routes the IP packet to whatever process the IP packet is addressed to, usually an MPEG decompression process in the case of MPEG packets containing-data (¶ 118-127). Therefore, the advanced home gateway in figure can transmit separate video feeds to the first client or “port extender” and the second client or “port extender”. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Hylton and de Hass with the teachings of Rakib in order to facilitate the centralized gateway comparing video feeds and providing the second port extender a second video feed for the benefit implementing a gateway that can implement TIVO like functions as well as interface peripherals to various types of broadband digital data delivery transmission mediums

and use IP addresses to route IP packets between components of the gateway and the client's set-top (Background – Rakib).

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to centralized gateways within a residence.

U.S. Pat. No. 6,622,307 to Ho

U.S. Pat. No. 5,722,041 to Freadman

U.S. Pat. No. 6,493,875 to Eames et al.

U.S. Pat. No. 6,647,015 to Malkemes et al.

U.S. Pat. No. 6,978,474 to Sheppard et al.

U.S. Pub. No. 2004/0255326 to Hicks III et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Parry whose telephone number is (571) 272-8328. The examiner can normally be reached on Monday through Friday, 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiners Initials: CJR  
February 1, 2006



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